

Release Notes for IWFM Version 2015.0.260

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This version of IWFM includes the following modifications and corrections:

1. **(09/25/2014)** For stream hydrograph output to DSS file, the C part of the pathname is modified as “FLOW_DEPTH” instead of “STAGE”.
2. **(10/06/2014)** For time-series input files, if tabs were used for DSS input filenames to represent a blank filename, IWFM was getting tricked into thinking that the filename was not empty leading to an error. This is now fixed.
3. **(10/08/2014)** A new feature is implemented to distribute the urban water demand specified for a city to the grid cells that were associated with that city. This feature enables the user to distribute the city-wide urban water demand to the associated cells with respect to the urban area in each cell. This allows an easy way for the distribution of urban water demand to cells when urban acreage changes over the simulation period.
4. **(10/20/2014)** To make the iterative solution of the conservation equation used for the routing of moisture in the root zone and the unsaturated zone more robust, bisection method is now used after 20 iterations if Newton-Raphson iteration has failed to converge.
5. **(10/20/2014)** In computing the water demand and routing the soil moisture for ponded crops, occasionally convergence was not achieved when the soil moisture content was equal to the total porosity. This is corrected.
6. **(11/04/2014)** With the new version of the Intel Fortran compiler, a floating point overflow error was occurring when a finite element cell had two nodes with the same y-coordinates. This is fixed by slightly modifying the code.

7. **(11/12/2014)** When lakes were not simulated, Simulation was giving an error about a timestep that was not recognized. This was caused by an attempt to convert lake parameter time units to simulation time unit in the absence of specified lake parameters. This is corrected.
8. **(11/12/2014)** In Pre-Processor, it is now checked that time unit of the flows defined in the stream rating tables (applicable to Stream Routing Component versions 4.0 and 4.1) is specified properly to avoid any errors later in Simulation.
9. **(11/12/2014)** In Stream Routing Component Version 4.1, the calculation of the upper limit of stream-aquifer interaction was incorrectly using the simulated stream depth instead of zero stream depth (i.e. stream head = stream bottom elevation). This was causing an occasional convergence error. This is corrected.
10. **(11/12/2014)** In the root zone component, it is now checked that the destination ID number (e.g. stream node number, subregion number, etc.) for the element surface flows is within the simulated range (e.g. a destination stream node number is not greater than the total stream nodes simulated).